

Coast Guard, Dept. of Homeland Security

§ 56.01-2

Subpart 56.65—Fabrication, Assembly and Erection

SOURCE: CGFR 68-82, 33 FR 18843, Dec. 18, 1968, unless otherwise noted.

56.65-1 General (replaces 127 through 135).

Subpart 56.70—Welding

56.70-1 General.
56.70-3 Limitations.
56.70-5 Material.
56.70-10 Preparation (modifies 127.3).
56.70-15 Procedure.
56.70-20 Qualification, general.

Subpart 56.75—Brazing

56.75-5 Filler metal.
56.75-10 Joint clearance
56.75-15 Heating
56.75-20 Brazing qualification.
56.75-25 Detail requirements.
56.75-30 Pipe joining details.

Subpart 56.80—Bending and Forming

56.80-5 Bending.
56.80-10 Forming (reproduces 129.2).
56.80-15 Heat treatment of bends and formed components.

Subpart 56.85—Heat Treatment of Welds

56.85-5 Heating and cooling method
56.85-10 Preheating.
56.85-15 Postheat treatment.

Subpart 56.90—Assembly

56.90-1 General.
56.90-5 Bolting procedure.
56.90-10 Threaded piping (modifies 135.5).

Subpart 56.95—Inspection

56.95-1 General (replaces 136).
56.95-5 Rights of access of marine inspectors.
56.95-10 Type and extent of examination required.

Subpart 56.97—Pressure Tests

56.97-1 General (replaces 137).
56.97-5 Pressure testing of nonstandard piping system components.
56.97-25 Preparation for testing (reproduces 137.2).
56.97-30 Hydrostatic tests (modifies 137.4).
56.97-35 Pneumatic tests (replaces 137.5).
56.97-38 Initial service leak test (reproduces 137.7).
56.97-40 Installation tests.

AUTHORITY: 33 U.S.C. 1321(j), 1509; 43 U.S.C. 1333; 46 U.S.C. 3306, 3703; E.O. 12234, 45 FR 58801, 3 CFR, 1980 Comp., p. 277; E.O. 12777, 56 FR 54757, 3 CFR, 1991 Comp., p. 351; Department of Homeland Security Delegation No. 0170.1.

Subpart 56.01—General

[CGFR 68-82, 33 FR 18843, Dec. 18, 1968, as amended by USCG-2003-16630, 73 FR 65171, Oct. 31, 2008]

§ 56.01-1 Scope (replaces 100.1).

(a) This part contains requirements for the various ships' and barges' piping systems and appurtenances.

(b) The respective piping systems installed on ships and barges shall have the necessary pumps, valves, regulation valves, safety valves, relief valves, flanges, fittings, pressure gages, liquid level indicators, thermometers, etc., for safe and efficient operation of the vessel.

(c) Piping for industrial systems on mobile offshore drilling units need not fully comply with the requirements of this part but must meet subpart 58.60 of this subchapter.

[CGFR 68-82, 33 FR 18843, Dec. 18, 1968, as amended by CGD 73-251, 43 FR 56799, Dec. 4, 1978]

§ 56.01-2 Incorporation by reference.

(a) Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in this section, the Coast Guard must publish notice of change in the FEDERAL REGISTER and the material must be available to the public. All approved material is available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030 or go to http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html. The material is also available for inspection at the Coast Guard Headquarters. Contact Commandant (CG-ENG), Attn: Office of Design and Engineering Systems, U.S. Coast Guard Stop 7509, 2703 Martin Luther King Jr. Avenue SE., Washington, DC 20593-7509. The material is also available from the sources listed below.

(b) *American National Standards Institute (ANSI)*, 25 West 43rd Street, New York, NY 10036:

(1) ANSI/ASME B1.1-1982 Unified Inch Screw Threads (UN and UNR Thread Form) (1982) (“ANSI/ASME B1.1”), 56.25-20; 56.60-1;

(2) ANSI/ASME B1.20.1-1983 Pipe Threads, General Purpose (Inch) (1983) (“ANSI/ASME B1.20.1”), 56.60-1;

(3) ANSI/ASME B1.20.3-1976 (Reaffirmed 1982) Dryseal Pipe Threads (Inch) (“ANSI/ASME B1.20.3”), 56.60-1;

(4) ANSI/ASME B16.15-1985 [Reaffirmed 1994] Cast Bronze Threaded Fittings, Classes 125 and 250 (1985) (“ANSI/ASME B16.15”), 56.60-1;

(c) *American Petroleum Institute (API)*, 1220 L Street, NW., Washington, DC 20005-4070:

(1) API Standard 607, Fire Test for Soft-Seated Quarter-Turn Valves, Manufacturing, Distribution and Marketing Department, Fourth Edition (1993) (“API 607”), 56.20-15; and

(2) [Reserved]

(d) *American Society of Mechanical Engineers (ASME) International*, Three Park Avenue, New York, NY 10016-5990:

(1) 2001 ASME Boiler and Pressure Vessel Code, Section I, Rules for Construction of Power Boilers (July 1, 2001) (“Section I of the ASME Boiler and Pressure Vessel Code”), 56.15-1; 56.15-5; 56.20-1; 56.60-1; 56.70-15; 56.95-10;

(2) ASME Boiler and Pressure Vessel Code, Section VIII, Division 1, Rules for Construction of Pressure Vessels (1998 with 1999 and 2000 addenda) (“Section VIII of the ASME Boiler and Pressure Vessel Code”), 56.15-1; 56.15-5; 56.20-1; 56.25-5; 56.30-10; 56.30-30; 56.60-1; 56.60-2; 56.60-15; 56.95-10;

(3) 1998 ASME Boiler & Pressure Vessel Code, Section IX, Welding and Brazing Qualifications (1998) (“Section IX of the ASME Boiler and Pressure Vessel Code”), 56.70-5; 56.70-20; 56.75-20;

(4) ASME B16.1-1998 Cast Iron Pipe Flanges and Flanged Fittings, Classes 25, 125, 250 (1998) (“ASME B16.1”), 56.60-1; 56.60-10;

(5) ASME B16.3-1998 Malleable Iron Threaded Fittings, Classes 150 and 300 (1998) (“ASME B16.3”), 56.60-1;

(6) ASME B16.4-1998 Gray Iron Threaded Fittings, Classes 125 and 250 (1998) (“ASME B16.4”), 56.60-1;

(7) ASME B16.5-2003 Pipe Flanges and Flanged Fittings NPS ½ Through NPS 24 Metric/Inch Standard (2003) (“ASME B16.5”), 56.25-20; 56.30-10; 56.60-1;

(8) ASME B16.9-2003 Factory-Made Wrought Steel Butt Welding Fittings (2003) (“ASME B16.9”), 56.60-1;

(9) ASME B16.10-2000 Face-to-Face and End-to-End Dimensions of Valves (2000) (“ASME B16.10”), 56.60-1;

(10) ASME B16.11-2001 Forged Fittings, Socket-Welding and Threaded (2001) (“ASME B16.11”), 56.30-5; 56.60-1;

(11) ASME B16.14-1991 Ferrous Pipe Plugs, Bushings, and Locknuts with Pipe Threads (1991) (“ASME B16.14”), 56.60-1;

(12) ASME B16.18-2001 Cast Copper Alloy Solder Joint Pressure Fittings (2001) (“ASME B16.18”), 56.60-1;

(13) ASME B16.20-1998 (Revision of ASME B16.20 1993), Metallic Gaskets for Pipe Flanges: Ring-Joint, Spiral-Wound, and Jacketed (1998) (“ASME B16.20”), 56.60-1;

(14) ASME B16.21-2005 (Revision of ASME B16.21-1992) Nonmetallic Flat Gaskets for Pipe Flanges (May 31, 2005) (“ASME B16.21”), 56.60-1;

(15) ASME B16.22-2001 (Revision of ASME B16.22-1995) Wrought Copper and Copper Alloy Solder Joint Pressure Fittings (Aug. 9, 2002) (“ASME B16.22”), 56.60-1;

(16) ASME B16.23-2002 (Revision of ASME B16.23-1992) Cast Copper Alloy Solder Joint Drainage Fittings: DWV (Nov. 8, 2002) (“ASME B16.23”), 56.60-1;

(17) ASME B16.24-2001 Cast Copper Alloy Pipe Flanges and Flanged Fittings, Class 150, 300, 400, 600, 900, 1500, and 2500 (2001) (“ASME B16.24”), 56.60-1;

(18) ASME B16.25-2003 Butt Welding Ends (2003) (“ASME B16.25”), 56.30-5; 56.60-1; 56.70-10;

(19) ASME B16.28-1994 Wrought Steel Butt Welding Short Radius Elbows and Returns (1994) (“ASME B16.28”), 56.60-1;

(20) ASME B16.29-2007 (Revision of ASME B16.29-2001) Wrought Copper and Wrought Copper Alloy Solder-Joint Drainage Fittings—DWV (Aug. 20, 2007) (“ASME B16.29”), 56.60-1;

(21) ASME B16.34-1996 Valves—Flanged, Threaded, and Welding End (1996) (“ASME B16.34”), 56.20-1; 56.60-1;

(22) ASME B16.42-1998 Ductile Iron Pipe Flanges and Flanged Fittings,

Classes 150 and 300 (1998) (“ASME B16.42”), 56.60-1;

(23) ASME B18.2.1-1996 Square and Hex Bolts and Screws (Inch Series) (1996) (“ASME B18.2.1”), 56.25-20; 56.60-1;

(24) ASME/ANSI B18.2.2-1987 Square and Hex Nuts (Inch Series) (1987) (“ASME/ANSI B18.2.2”), 56.25-20; 56.60-1;

(25) ASME B31.1-2001 Power Piping ASME Code for Pressure Piping, B31 (2001) (“ASME B31.1”), 56.01-3; 56.01-5; 56.07-5; 56.07-10; 56.10-1; 56.10-5; 56.15-1; 56.15-5; 56.20-1; 56.25-7; 56.30-1; 56.30-5; 56.30-10; 56.30-20; 56.35-1; 56.50-1; 56.50-15; 56.50-40; 56.50-65; 56.50-70; 56.50-97; 56.60-1; 56.65-1; 56.70-10; 56.70-15; 56.80-5; 56.80-15; 56.95-1; 56.95-10; 56.97-1;

(26) ASME B36.10M-2004 Welded and Seamless Wrought Steel Pipe (2004) (“ASME B36.10M”), 56.07-5; 56.30-20; 56.60-1; and

(27) ASME B36.19M-2004 Stainless Steel Pipe (2004) (“ASME B36.19M”), 56.07-5; 56.60-1.

(28) ASME SA-675 (1998), Specification for Steel Bars, Carbon, Hot-Wrought, Special Quality, Mechanical Properties (“ASME SA-675”), 56.60-2.

(e) *ASTM International*, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959, 877-909-2786, <http://www.astm.org>;

(1) ASTM A 36/A 36M-97a, Standard Specification for Carbon Structural Steel (“ASTM A 36”), 56.30-10;

(2) ASTM A 47-90 (1995), Standard Specification for Ferritic Malleable Iron Castings (“ASTM A 47”), 56.60-1;

(3) ASTM A 53-98, Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless (“ASTM Specification A 53” or “ASTM A 53”), 56.10-5; 56.60-1;

(4) ASTM A 106-95, Standard Specification for Seamless Carbon Steel Pipe for High-Temperature Service (“ASTM A 106”), 56.60-1;

(5) ASTM A 126-95, Standard Specification for Gray Iron Castings for Valves, Flanges, and Pipe Fittings (“ASTM A 126”), 56.60-1;

(6) ASTM A134-96 (Reapproved 2012), Standard Specification for Pipe, Steel, Electric-Fusion (Arc)-Welded (Sizes NPS 16 and Over) (“ASTM A 134”), (approved March 1, 2012), incorporation by reference approved for § 56.60-1;

(7) ASTM A 135-97c, Standard Specification for Electric-Resistance-Welded Steel Pipe (“ASTM A 135”), 56.60-1;

(8) ASTM A 139-96, Standard Specification for Electric-Fusion (Arc)-Welded Steel Pipe (NPS 4 and Over) (“ASTM A 139”), 56.60-1;

(9) ASTM A 178/A 178M-95, Standard Specification for Electric-Resistance-Welded Carbon Steel and Carbon-Manganese Steel Boiler and Superheater Tubes (“ASTM A 178”), 56.60-1;

(10) ASTM A179/A179M-90a (Reapproved 2012), Standard Specification for Seamless Cold-Drawn Low-Carbon Steel Heat-Exchanger and Condenser Tubes (“ASTM A 179”), (approved March 1, 2012), incorporation by reference approved for § 56.60-1;

(11) ASTM A 182/A 182M-97c, Standard Specification for Forged or Rolled Alloy-Steel Pipe Flanges, Forged Fittings, and Valves and Parts for High-Temperature Service (“ASTM A-182”), 56.50-105;

(12) ASTM A 192/A 192M-91 (1996), Standard Specification for Seamless Carbon Steel Boiler Tubes for High-Pressure Service (“ASTM A 192”), 56.60-1;

(13) ASTM A 194/A 194M-98b, Standard Specification for Carbon and Alloy Steel Nuts for Bolts for High Pressure or High Temperature Service, or Both (“ASTM A-194”), 56.50-105;

(14) ASTM A 197-87 (1992), Standard Specification for Cupola Malleable Iron (“ASTM A 197”), 56.60-1;

(15) ASTM A 210/A 210M-96, Standard Specification for Seamless Medium-Carbon Steel Boiler and Superheater Tubes (“ASTM A 210”), 56.60-1;

(16) ASTM A 213/A 213M-95a, Standard Specification for Seamless Ferritic and Austenitic Alloy-Steel Boiler, Superheater, and Heat-Exchanger Tubes (“ASTM A 213”), 56.60-1;

(17) ASTM A214/A214M-96 (Reapproved 2012), Standard Specification for Electric-Resistance-Welded Carbon Steel Heat-Exchanger and Condenser Tubes (“ASTM A 214”), (approved March 1, 2012), incorporation by reference approved for § 56.60-1;

(18) ASTM A 226/A 226M-95, Standard Specification for Electric-Resistance-Welded Carbon Steel Boiler and Superheater Tubes for High-Pressure Service (“ASTM A 226”), 56.60-1;

(19) ASTM A 234/A 234M-97, Standard Specification for Piping Fittings of Wrought Carbon Steel and Alloy Steel for Moderate and High Temperature Service ("ASTM A 234"), 56.60-1;

(20) ASTM A 249/A 249M-96a, Standard Specification for Welded Austenitic Steel Boiler, Superheater, Heat-Exchanger, and Condenser Tubes ("ASTM A 249"), 56.60-1;

(21) ASTM A 268/A 268M-96, Standard Specification for Seamless and Welded Ferritic and Martensitic Stainless Steel Tubing for General Service ("ASTM A 268"), 56.60-1;

(22) ASTM A 276-98, Standard Specification for Stainless Steel Bars and Shapes ("ASTM A 276"), 56.60-2;

(23) ASTM A 307-97, Standard Specification for Carbon Steel Bolts and Studs, 60,000 PSI Tensile Strength ("ASTM A 307"), 56.25-20;

(24) ASTM A 312/A 312M-95a, Standard Specification for Seamless and Welded Austenitic Stainless Steel Pipes ("ASTM A-312" or "ASTM A 312"), 56.50-105; 56.60-1;

(25) ASTM A 320/A 320M-97, Standard Specification for Alloy/Steel Bolting Materials for Low-Temperature Service ("ASTM A-320"), 56.50-105;

(26) ASTM A 333/A 333M-94, Standard Specification for Seamless and Welded Steel Pipe for Low-Temperature Service ("ASTM A-333" or "ASTM A 333"), 56.50-105; 56.60-1;

(27) ASTM A 334/A 334M-96, Standard Specification for Seamless and Welded Carbon and Alloy-Steel Tubes for Low-Temperature Service ("ASTM A-334" or "ASTM A 334"), 56.50-105; 56.60-1;

(28) ASTM A 335/A 335M-95a, Standard Specification for Seamless Ferritic Alloy-Steel Pipe for High-Temperature Service ("ASTM A 335"), 56.60-1;

(29) ASTM A 350/A 350M-97, Standard Specification for Carbon and Low-Alloy Steel Forgings, Requiring Notch; Toughness Testing for Piping Components ("ASTM A-350"), 56.50-105;

(30) ASTM A 351/A 351M-94a, Standard Specification for Castings, Austenitic, Austenitic-Ferritic (Duplex), for Pressure-Containing Parts ("ASTM A-351"), 56.50-105;

(31) ASTM A 352/A 352M-93 (1998), Standard Specification for Steel Castings, Ferritic and Martensitic, for Pressure-Containing Parts, Suitable

for Low-Temperature Service ("ASTM A-352"), 56.50-105;

(32) ASTM A 358/A 358M-95a, Standard Specification for Electric-Fusion-Welded Austenitic Chromium-Nickel Alloy Steel Pipe for High-Temperature Service ("ASTM A 358"), 56.60-1;

(33) ASTM A 369/A 369M-92, Standard Specification for Carbon and Ferritic Alloy Steel Forged and Bored Pipe for High-Temperature Service ("ASTM A 369"), 56.60-1;

(34) ASTM A 376/A 376M-96, Standard Specification for Seamless Austenitic Steel Pipe for High-Temperature Central-Station Service ("ASTM A 376"), 56.60-1; 56.60-2;

(35) ASTM A 395/A 395M-98, Standard Specification for Ferritic Ductile Iron Pressure-Retaining Castings for Use at Elevated Temperatures ("ASTM A 395"), 56.50-60; 56.60-1; 56.60-15;

(36) ASTM A 403/A 403M-98, Standard Specification for Wrought Austenitic Stainless Steel Piping Fittings ("ASTM A 403"), 56.60-1;

(37) ASTM A 420/A 420M-96a, Standard Specification for Piping Fittings of Wrought Carbon Steel and Alloy Steel for Low-Temperature Service ("ASTM A-420" or "ASTM A 420"), 56.50-105; 56.60-1;

(38) ASTM A 520-97, Standard Specification for Supplementary Requirements for Seamless and Electric-Resistance-Welded Carbon Steel Tubular Products for High-Temperature Service Conforming to ISO Recommendations for Boiler Construction ("ASTM A 520"), 56.60-1;

(39) ASTM A 522/A 522M-95b, Standard Specification for Forged or Rolled 8 and 9% Nickel Alloy Steel Flanges, Fittings, Valves, and Parts for Low-Temperature Service ("ASTM A-522"), 56.50-105;

(40) ASTM A 536-84 (Reapproved 2009), Standard Specification for Ductile Iron Castings ("ASTM A 536"), (approved May 1, 2009), incorporation by reference approved for § 56.60-1;

(41) ASTM A 575-96 (Reapproved 2007), Standard Specification for Steel Bars, Carbon, Merchant Quality, M-Grades ("ASTM A 575"), (approved September 1, 2005), incorporation by reference approved for § 56.60-2;

(42) ASTM A576-90b (Reapproved 2012), Standard Specification for Steel

Bars, Carbon, Hot-Wrought, Special Quality ("ASTM A576"), (approved March 1, 2012), incorporation by reference approved for § 56.60-2;

(43) ASTM B 16-92, Standard Specification for Free-Cutting Brass Rod, Bar, and Shapes for Use in Screw Machines ("ASTM B 16"), 56.60-2;

(44) ASTM B 21-96, Standard Specification for Naval Brass Rod, Bar, and Shapes ("ASTM B 21"), 56.60-2;

(45) ASTM B 26/B 26M-97, Standard Specification for Aluminum-Alloy Sand Castings ("ASTM B 26"), 56.60-2;

(46) ASTM B 42-96, Standard Specification for Seamless Copper Pipe, Standard Sizes ("ASTM B 42"), 56.60-1;

(47) ASTM B 43-96, Standard Specification for Seamless Red Brass Pipe, Standard Sizes ("ASTM B 43"), 56.60-1;

(48) ASTM B 68-95, Standard Specification for Seamless Copper Tube, Bright Annealed ("ASTM B 68"), 56.60-1;

(49) ASTM B 75-97, Standard Specification for Seamless Copper Tube ("ASTM B 75"), 56.60-1;

(50) ASTM B 85-96, Standard Specification for Aluminum-Alloy Die Castings ("ASTM B 85"), 56.60-2;

(51) ASTM B 88-96, Standard Specification for Seamless Copper Water Tube ("ASTM B 88"), 56.60-1;

(52) ASTM B 96-93, Standard Specification for Copper-Silicon Alloy Plate, Sheet, Strip, and Rolled Bar for General Purposes and Pressure Vessels ("ASTM B 96"), 56.60-2;

(53) ASTM B 111-95, Standard Specification for Copper and Copper-Alloy Seamless Condenser Tubes and Ferrule Stock ("ASTM B 111"), 56.60-1;

(54) ASTM B 124-96, Standard Specification for Copper and Copper Alloy Forging Rod, Bar, and Shapes ("ASTM B 124"), 56.60-2;

(55) ASTM B 134-96, Standard Specification for Pipe, Steel, Electric-Fusion (Arc)-Welded (Sizes NPS 16 and Over) ("ASTM B 134"), 56.60-1;

(56) ASTM B 161-93, Standard Specification for Nickel Seamless Pipe and Tube ("ASTM B 161"), 56.60-1;

(57) ASTM B 165-93, Standard Specification of Nickel-Copper Alloy (UNS NO4400) Seamless Pipe and Tube ("ASTM B 165"), 56.60-1;

(58) ASTM B 167-97a, Standard Specification for Nickel-Chromium-Iron Al-

loys (UNS NO6600, NO6601, NO6603, NO6690, NO6025, and NO6045) Seamless Pipe and Tube ("ASTM B 167"), 56.60-1;

(59) ASTM B 171-95, Standard Specification for Copper-Alloy Plate and Sheet for Pressure Vessels, Condensers, and Heat Exchangers ("ASTM B 171"), 56.60-2;

(60) ASTM B 210-95, Standard Specification for Aluminum and Aluminum-Alloy Drawn Seamless Tubes ("ASTM B 210"), 56.60-1;

(61) ASTM B 234-95, Standard Specification for Aluminum and Aluminum-Alloy Drawn Seamless Tubes for Condensers and Heat Exchangers ("ASTM B 234"), 56.60-1;

(62) ASTM B 241/B 241M-96, Standard Specification for Aluminum and Aluminum-Alloy Seamless Pipe and Seamless Extruded Tube ("ASTM B 241"), 56.60-1;

(63) ASTM B 280-97, Standard Specification for Seamless Copper Tube for Air Conditioning and Refrigeration Field Service ("ASTM B 280"), 56.60-1;

(64) ASTM B 283-96, Standard Specification for Copper and Copper-Alloy Die Forgings (Hot-Pressed) ("ASTM B 283"), 56.60-2;

(65) ASTM B 315-93, Standard Specification for Seamless Copper Alloy Pipe and Tube ("ASTM B 315"), 56.60-1;

(66) ASTM B 361-95, Standard Specification for Factory-Made Wrought Aluminum and Aluminum-Alloy Welding Fittings ("ASTM B 361"), 56.60-1;

(67) ASTM B 858M-95, Standard Test Method for Determination of Susceptibility to Stress Corrosion Cracking in Copper Alloys Using an Ammonia Vapor Test ("ASTM B 858M"), 56.60-2;

(68) ASTM E 23-96, Standard Test Methods for Notched Bar Impact Testing of Metallic Materials ("ASTM E 23"), 56.50-105;

(69) ASTM F682-82a (Reapproved 2008), Standard Specification for Wrought Carbon Steel Sleeve-Type Pipe Couplings ("ASTM F 682"), (approved November 1, 2008), incorporation by reference approved for § 56.60-1;

(70) ASTM F1006-86 (Reapproved 2008), Standard Specification for Entrainment Separators for Use in Marine Piping Applications ("ASTM F 1006"), (approved November 1, 2008), incorporation by reference approved for § 56.60-1;

(71) ASTM F1007-86 (Reapproved 2007), Standard Specification for Pipeline Expansion Joints of the Packed Slip Type for Marine Application ("ASTM F 1007"), (approved December 1, 2007), incorporation by reference approved for § 56.60-1;

(72) ASTM F1020-86 (Reapproved 2011), Standard Specification for Line-Blind Valves for Marine Applications ("ASTM F 1020"), (approved April 1, 2011), incorporation by reference approved for § 56.60-1;

(73) ASTM F1120-87 (Reapproved 2010), Standard Specification for Circular Metallic Bellows Type Expansion Joints for Piping Applications ("ASTM F 1120"), (approved May 1, 2010), incorporation by reference approved for § 56.60-1;

(74) ASTM F1123-87 (Reapproved 2010), Standard Specification for Non-Metallic Expansion Joints ("ASTM F 1123"), (approved March 1, 2010), incorporation by reference approved for § 56.60-1;

(75) ASTM F1139-88 (Reapproved 2010), Standard Specification for Steam Traps and Drains ("ASTM F 1139"), (approved March 1, 2010), incorporation by reference approved for § 56.60-1;

(76) ASTM F1172-88 (Reapproved 2010), Standard Specification for Fuel Oil Meters of the Volumetric Positive Displacement Type ("ASTM F 1172"), (approved March 1, 2010), incorporation by reference approved for § 56.60-1;

(77) ASTM F 1173-95, Standard Specification for Thermosetting Resin Fiberglass Pipe and Fittings to be Used for Marine Applications ("ASTM F 1173"), 56.60-1;

(78) ASTM F1199-88 (Reapproved 2010), Standard Specification for Cast (All Temperatures and Pressures) and Welded Pipe Line Strainers (150 psig and 150 °F Maximum) ("ASTM F 1199"), (approved March 1, 2010), incorporation by reference approved for § 56.60-1;

(79) ASTM F1200-88 (Reapproved 2010), Standard Specification for Fabricated (Welded) Pipe Line Strainers (Above 150 psig and 150 °F) ("ASTM F 1200"), (approved March 1, 2010), incorporation by reference approved for § 56.60-1;

(80) ASTM F1201-88 (Reapproved 2010), Standard Specification for Fluid

Conditioner Fittings in Piping Applications above 0 °F ("ASTM F 1201"), (approved May 1, 2010), incorporation by reference approved for § 56.60-1;

(81) ASTM F 1387-93, Standard Specification for Performance of Mechanically Attached Fittings ("ASTM F 1387"), 56.30-25;

(82) ASTM F 1476-95a, Standard Specification for Performance of Gasketed Mechanical Couplings for Use in Piping Applications ("ASTM F 1476"), 56.30-35; and

(83) ASTM F 1548-94, Standard Specification for the Performance of Fittings for Use with Gasketed Mechanical Couplings, Used in Piping Applications ("ASTM F 1548"), 56.30-35.

(f) *Expansion Joint Manufacturers Association Inc. (EJMA)*, 25 North Broadway, Tarrytown, NY 10591:

(1) Standards of the Expansion Joint Manufacturers Association, 1980, 56.60-1; and

(2) [Reserved]

(g) *Fluid Controls Institute Inc. (FCI)*, 31 South Street, Suite 303, Morristown, NJ 07960:

(1) FCI 69-1 Pressure Rating Standard for Steam Traps ("FCI 69-1"), 56.60-1; and

(2) [Reserved]

(h) *International Maritime Organization (IMO)*, Publications Section, 4 Albert Embankment, London, SE1 7SR United Kingdom:

(1) Resolution A.753(18) Guidelines for the Application of Plastic Pipes on Ships ("IMO Resolution A.753(18)"), 56.60-25; and

(2) [Reserved]

(i) *International Organization for Standardization (ISO)*, Case Postal 56, CH-1211 Geneva 20 Switzerland:

(1) ISO 15540 Ships and Marine Technology-Fire Resistance of Hose Assemblies-Test Methods, First Edition (Aug. 1, 1999) ("ISO 15540"), 56.60-25; and

(2) [Reserved]

(j) *Instrument Society of America (ISA)*, 67 Alexander Drive, Research Triangle Park, NC 27709:

(1) ISA-S75.02 (1996) ("ISA-S75.02"), 56.20-15; and

(2) [Reserved]

(k) *Manufacturers Standardization Society of the Valve and Fittings Industry, Inc. (MSS)*, 127 Park Street NE, Vienna, VA 22180:

(1) SP-6-2001 Standard Finishes for Contact Faces of Pipe Flanges and Connecting-End Flanges of Valves and Fittings (2001) ("MSS SP-6"), 56.25-10; 56.60-1;

(2) SP-9-2001 Spot Facing for Bronze, Iron and Steel Flanges (2001) ("MSS SP-9"), 56.60-1;

(3) SP-25-1998 Standard Marking System for Valves, Fittings, Flanges and Unions (1998) ("MSS SP-25"), 56.15-1; 56.20-5; 56.60-1;

(4) SP-44-1996 Steel Pipe Line Flanges (Reaffirmed 2001) ("MSS SP-44"), 56.60-1;

(5) SP-45-2003 Bypass and Drain Connections (2003) ("MSS SP-45"), 56.20-20; 56.60-1;

(6) SP-51-2003 Class 150LW Corrosion Resistant Cast Flanges and Flanged Fittings (2003) ("MSS SP-51"), 56.60-1;

(7) SP-53-95 Quality Standard for Steel Castings and Forgings for Valves, Flanges and Fittings and Other Piping Components-Magnetic Particle Examination Method (1995) ("MSS SP-53"), 56.60-1;

(8) SP-55-2001 Quality Standard for Steel Castings for Valves, Flanges and Fittings and Other Piping Components-Visual Method (2001) ("MSS SP-55"), 56.60-1;

(9) SP-58 Pipe Hangers and Supports-Materials, Design and Manufacture (1993) ("MSS SP-58"), 56.60-1;

(10) SP-61-2003 Pressure Testing of Steel Valves (2003) ("MSS SP-61"), 56.60-1;

(11) SP-67 Butterfly Valves (1995) ("MSS SP-67"), 56.60-1;

(12) SP-69 Pipe Hangers and Supports-Selection and Application (1996) ("MSS SP-69"), 56.60-1;

(13) SP-72 Ball Valves with Flanged or Butt-Welding Ends for General Service (1987) ("MSS SP-72"), 56.60-1;

(14) SP-73 (R 96) Brazing Joints for Copper and Copper Pressure Fittings (1991) ("MSS SP-73"), 56.60-1; and

(15) SP-83 Class 3000 Steel Pipe Unions, Socket Welding and Threaded (1995) ("MSS SP-83"), 56.60-1;

(1) *Society of Automotive Engineers (SAE)*, 400 Commonwealth Drive, Warrendale, PA 15096:

(1) J1475 (1996) Surface Vehicle Hydraulic Hose Fittings for Marine Applications (June 1996) ("SAE J1475"), 56.60-25; and

(2) J1942 (1997) Standards Hose and Hose Assemblies for Marine Applications (May 1997) ("SAE J1942"), 56.60-25.

[USCG-2003-16630, 73 FR 65171, Oct. 31, 2008, as amended by USCG-2009-0702, 74 FR 49228, Sept. 25, 2009; USCG-2012-0832, 77 FR 59777, Oct. 1, 2012; USCG-2012-0866, 78 FR 13250, Feb. 27, 2013; USCG 2013-0671, 78 FR 60148, Sept. 30, 2013]

§ 56.01-3 Power boilers, external piping and appurtenances (Replaces 100.1.1, 100.1.2, 122.1, 132 and 133).

(a) Power boiler external piping and components must meet the requirements of this part and §§ 52.01-105, 52.01-110, 52.01-115, and 52.01-120 of this chapter.

(b) Specific requirements for external piping and appurtenances of power boilers, as defined in §§ 100.1.1 and 100.1.2, appearing in the various paragraphs of ASME B31.1 (incorporated by reference; see 46 CFR 56.01-2), are not adopted unless specifically indicated elsewhere in this part.

[CGD 77-140, 54 FR 40602, Oct. 2, 1989; 55 FR 39968, Oct. 1, 1990; USCG-2003-16630, 73 FR 65174, Oct. 31, 2008]

§ 56.01-5 Adoption of ASME B31.1 for power piping, and other standards.

(a) Piping systems for ships and barges must be designed, constructed, and inspected in accordance with ASME B31.1 (incorporated by reference; see 46 CFR 56.01-2), as limited, modified, or replaced by specific requirements in this part. The provisions in the appendices to ASME B31.1 are adopted and must be followed when the requirements of ASME B31.1 or the rules in this part make them mandatory. For general information, table 56.01-5(a) lists the various paragraphs and sections in ASME B31.1 that are limited, modified, replaced, or reproduced by rules in this part.

TABLE 56.01-5(a)—LIMITATIONS AND MODIFICATIONS IN THE ADOPTION OF ASME B31.1 FOR PRESSURE AND POWER PIPING

Section or paragraph in ASME B31.1 and disposition	Unit in this part
100.1 replaced by	56.01-1.
100.2 modified by	56.07-5.
101 through 104.7 modified by	56.07-10.
101.2 modified by	56.07-10(a), (b).